

Nalco Docket No.: 5593C1

OFFICIALCLAIMS

1. (currently amended) A method for modifying the rheology of a slurry of a solid material and water, wherein the solid material is nickel ore, cobalt ore, precious metals ore, copper ore, taconite, mineral sands, coal bauxite or a mixture thereof, the method comprising adding to the slurry a sulfonate containing polymer and wet grinding the slurry in a mill wherein the sulfonate containing polymer is selected from the group consisting of sulfomethylated polymers of acrylamide and acrylic acid and polymers comprising acrylamide, acrylic acid and acrylamido-2-methyl propane sulfonic acid.
2. (cancelled)
3. (previously cancelled)
4. (cancelled)
5. (cancelled)
6. (currently amended) The method of claim 1 wherein the polymer is further characterized as comprising repeat units derived from about 3 to about 40 mole% [acrylamido-2-methyl propane sulfonate monomer] acrylamidomethyl sulfonate, from about 5 to about 45 mole% acrylamide [monomer] and from about 30 to about 70 mole% acrylic acid [monomer].
7. (currently amended) The method of claim 1 wherein the polymer is further characterized as comprising repeat units derived from about 5 to about 10 mole% [acrylamido-2-methyl propane sulfonate monomer] acrylamidomethyl sulfonate, from about 30 to about 40 mole% acrylamide [monomer] and from about 55 to about 65 mole% acrylic acid [monomer].
- 8-13. (cancelled)